

Date: Monday, 02/10/2006 7:16:03 AM
 User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : SADDLE FITTING, AFT (OUTBOARD/INBOARD)
Job Number : 28804	
Estimate Number : 10533	
P.O. Number : N/A	Part Number : D2573
This Issue : 02/10/2006 S.O. No. : N/A	Drawing Number : D2573 REV E
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : MACHINED PARTS	Drawing Revision : E
Previous Run : 28446	Material : N/A
Written By : <u>[Signature]</u>	Due Date : 09/10/2006 Qty: 4 Um: Each
Checked & Approved By : <u>[Signature]</u>	
Comment : Est: 1 As Per RevE 06-01-27 JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D6101007	7075-T7351 8.25X7.75X2.5
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)
 7075-T7351 8.25X7.75X2.5
 Make from D6101-007 billet for D2573
 Ensure that grain is along 7.75" length
 Batch No: B25354

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1
 Program Batch No 28804 Double check by: MB

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets
 3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets
 4-Deburr and remove all machining marks
 5-Tumble to remove sharp edges.

J.G. [Signature] 06/10/03 4

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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Comment: CONVENTIONAL MILLING MACHINE
 Machine keyway as per dwg D2573 & D2574

J.G. 06/10/04 4

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ ☐ Date: 06/10/11
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/10/08	2	the thickness of the 1.510" Bore is under tolerance by 0.003"	CP 06.10.04 PV RS1042	PART IS OK per attached DS email	RG 06.10.03	2 06.10.11	CP 06.10.03 PV RS1042	2 06.10.11

NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

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Job Number: 28804

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Seq. #:	Machine Or Operation:	Description :
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4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.G 06/10/04 4

5.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

En 06/10/05 x4

6.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

g 06/10/05 x4

7.0	POWDER COATING	POWDER COATING
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Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

a.m 06-10-0

(4)

8.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
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Comment: INSPECT POWDER COAT

P 6/10/11 (4)

9.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: styso

P 6/10/11 (4)

10.0	QC21	FINAL INSPECTION/W/O RELEASE
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Comment: FINAL INSPECTION/W/O RELEASE

06/10/11 (4)

Job Completion



U 06-10-11

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____







QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			




NOTE: Date & initial all entries

05.12.06

MATERIAL: 7075-T7351 (QQ-A-250/12)
(REF DART SPEC. D6102-001)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER
DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- | | |
|---|---|
|  | ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010 |
|  | ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125 |
|  | CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES) |
|  | CHAMFER 0.063" x 45° ALL AROUND |
|  | CHAMFER 0.033" x 45° (SEE DETAIL C)  |

E	05.07.13	ADD CHAMFER ON RIDGE NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCRP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

DESIGN	DRAWN BY	 DART AEROSPACE LTD. MARKHAM, ONTARIO, CANADA	
DS	PH		
CHECKED 	APPROVED 	DRAWING NO D2573	REV. _____ SHEET 1 OF _____
DATE 05.07.13	TITLE OUTER AFT SADDLE		SCALE 2: _____

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REFERENCE ONLY

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 28804
Description: Saddle, Aft Outboard	Part Number: D2573
Inspection Dwg: D2573 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	1	2	3	4		
A	0.438	0.443	DT8682	0.440	0.440	0.440	0.440		
B	1.745	1.755		1.751	1.750	1.750	1.751		
C	3.495	3.505		3.501	3.500	3.500	3.501		
D	1.745	1.755		1.751	1.751	1.751	1.751		
E	7.990	8.010		8.004	8.003	8.004	8.004		
F	0.490	0.510		0.501	0.501	0.501	0.501		
G	0.257	0.262	DT8683	0.258	0.258	0.258	0.258		
H	0.375	0.380	DT8684	0.376	0.376	0.376	0.376		
I	0.490	0.510		0.501	0.501	0.502	0.500		
J	1.174	1.184		1.180	1.179	1.179	1.180		
K	0.558	0.578		0.568	0.564	0.567	0.569		
L	1.174	1.184		1.179	1.180	1.179	1.180		
M	1.365	1.375		1.369	1.369	1.370	1.369		
N	2.495	2.505		2.499	2.499	2.498	2.499		
O	4.119	4.129		4.122	4.121	4.122	4.121		
P	0.115	0.135		0.122	0.122	0.124	0.123		
Q	0.115	0.135		0.134	0.134	0.135	0.135		
R	0.240	0.260		0.254	0.254	0.252	0.251		
S	0.115	0.135		0.118	0.119	0.119	0.199		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	3.210	3.250		3.231	3.231	3.231	3.231		
V	0.230	0.250		0.240	0.241	0.242	0.241		
W	0.115	0.135		0.118	0.119	0.119	0.199		
X	0.308	0.313		0.310	0.310	0.310	0.310		
Y	0.760	0.765		0.761	0.761	0.761	0.761		
Z	0.352	0.372		0.365	0.364	0.366	0.364		
AA	0.470	0.530		0.500	0.500	0.504	0.500		
AB	0.615	0.635		0.628	0.629	0.624	0.624		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.249	0.248	0.247	0.246		
AE	1.500	1.520		1.510	1.510	1.510	1.510		
AF	0.115	0.135		0.134	0.135	0.134	0.133		
AG	0.240	0.280		0.260	0.260	0.261	0.261		
AH	0.240	0.260		0.255	0.254	0.254	0.254		
AI	2.000	2.020		2.000	2.001	2.001	2.002		
AJ	0.023	0.043		0.033	0.033	0.063	0.063		
Accept/Reject									

Measured by: J. G
Date: 06/10/03

Audited by: E
Date: 06/10/05

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

Chris Provencal

From: David Shepherd [dshepherd@dartaero.com]
Sent: October 4, 2006 3:56 PM
To: 'Chris Provencal'
Subject: RE: ncr D2573 saddle

I think this is an acceptable deviation.

David

From: Chris Provencal [mailto:cprovencal@dartaero.com]
Sent: Wednesday, October 04, 2006 11:34 AM
To: David Shepherd (David Shepherd)
Subject: ncr D2573 saddle

David,

One D2573 saddle. The wall thickness of the saddle-to-crosstube bore is 0.113" instead of 0.125" +/- 0.010". I looked through SR-D205-634, and I can't find anything that analyzes through that section, seems to be done with ansys, but I figure you've probably encountered that before. Is this acceptable?

Chris

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No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.407 / Virus Database: 268.12.12/462 - Release Date: 10/3/2006

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No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.1.407 / Virus Database: 268.12.12/462 - Release Date: 10/3/2006

04/10/2006